

REMARKS

Reconsideration of this application, as amended, is respectfully requested.

This application has been reviewed in light of the Office Action dated January 29, 2004. Claims 1-11, and 17-25 are currently pending. As indicated above, Claims 12-16 and 26-28, which were previously withdrawn from consideration, have been cancelled without prejudice. It is gratefully acknowledged that the Examiner still finds allowable subject matter in Claims 5-8, 19, and 22-25.

In the Office Action, the Examiner has rejected Claims 1, 2, 9-11, 17, and 18 under 35 U.S.C. § 102(e) as being anticipated by *Nystrom et al.* (U.S. 6,189,123), and Claims 3, 4, 20, and 21 under 35 U.S.C. § 103(a) as being unpatentable over *Nystrom* in view of *Hagenauer et al.* (U.S. 6,377,610).

The present invention is directed to a system and method for channel encoding/decoding to perform soft-decision iterative decoding in a communication system. More specifically, in the present invention, a message information receiver receives information about service class, i.e., bit error rate, time delay, and data service type, of a received message. That is, the present invention includes a received message (a message to transmit systematic symbols) and a message for transmitting service class information about the received message (transmitted message), wherein the message information receiver receives service class information about the received message. According to the service class, a controller determines the iterative decoding number and performs iterative decoding on the received message. Because Claims 1 and 17 are the remaining rejected independent claims, our analysis will focus on them.

As stated above, the Examiner has rejected independent Claims 1 and 17 under 35 U.S.C. § 102(e) as being anticipated by *Nystrom*. More specifically, the Examiner asserts that *Nystrom* discloses a message information receiver for receiving information about a message to be received and a controller for determining an iterative decoding number according to the received message information. However, it is respectfully submitted that the Examiner is incorrect.

Block 116 in *Nystrom* is used to determine the success of the decoding of a received message. There is no mention in this cited section or any other section of *Nystrom* that the block 116, which the Examiner attempts to equate with the controller of Claim 1, determines an iterative decoding number. Further, as recited in Claims 1 and 17, a message information receiver receives information about a message that will be received. From this information, the message information receiver determines an iterative decoding number to be used by the decoder. In *Nystrom*, block 116 does not determine an iterative decoding number and does not pass any information to the decoder 112. Instead, block 116 receives a decoded signal from the decoder 112 to determine the decoding success. Therefore, it is respectfully submitted that the Examiner is incorrect in rejecting Claims 1 and 17 of the present application as being anticipated by *Nystrom*, and it is respectfully requested that the rejection of Claims 1 and 17 be withdrawn.

Rejected and objected to dependent Claims 2-11 and 18-25 depend from independent Claims 1 and 17, respectively, and therefore contain the same limitations as independent Claims 1 and 17. Therefore, for at least the same reasons given for independent Claims 1 and 17, Claims 2-11 and 18-25 are believed to be patentable.

In view of the preceding amendments and remarks, it is respectfully submitted that all pending claims, namely Claims 1-11, and 17-25, are in condition for allowance. Should the

Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicant's attorney at the number given below.

Respectfully submitted,



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